

REMARKS/ARGUMENTS

Claims 12-18 and new Claims 19-26 are active in the case. Reconsideration is respectfully requested.

The present invention relates to a thermoplastic polyurethane.

Claim Amendments

Claim 12 has been amended to recite that the high molecular weight diol component is a mixture or combination of a polyether diol and a polysiloxane diol, each diol having a number average molecular weight that ranges from 1,000 to 10,000. Applicants believe that this new, more narrow, limitation regarding the high molecular weight diol component is supported by Examples 5 and 10 of the text. The maximum molecular weight limitation of 10,000 is supported by the disclosure at page 7, first full paragraph. Page 8, lines 16-19 refers to polyether diols as a type of high molecular weight diol component of the present thermoplastic polyurethane.

The subject matter of the new claims is supported by the original claims of the application and by the subject matter of the text on pages 6 and 7. Entry of the amendments and new claims into the text is respectfully requested.

Prior Art Rejection

Claims 12-16 stand rejected based on 35 USC 102(e) as anticipated by Forshner et al, U. S. Patent Publication 2002/0052461. This ground of rejection is respectfully traversed.

The Forschner et al publication clearly describes a thermoplastic polyurethane that is prepared by the reaction of a poly(trimethylene carbonate) polyol, a glycol chain extender and a polyisocyanate. However, the present thermoplastic polyurethane is distinguished over that of the publication in that the high molecular weight diol component is limited to a

combination of a polyether diol and a polysiloxane diol, wherein each diol has a number average molecular weight ranging from 1,000 to 10,000. This combination is supported by Examples 5 and 10 of the application and on pages 8 and 9 of the text. The resulting thermoplastic polyurethane that is produced possesses good impact resistance. In fact, the present claims are clearly distinguished over the reference and withdrawal of the anticipatory ground of rejection is respectfully requested.

Claims 12-17 stand rejected based on 35 USC 103(a) as obvious over Forshner et al in views of Vedula et al, U. S. Patent 5,959,059. This ground of rejection is respectfully traversed.

Applicants retain their position as stated above with respect to Forshner et al.

Applicants submit that Vedula et al does not bring the prior art closer to the present invention, because, although it discloses a thermoplastic polyurethane that is prepared by the reaction of a hydroxyl terminated polyether intermediate, a glycol chain extender and a polyisocyanate, there is no teaching or suggestion of a polyether polyol that is the combination of the present claims of a polyether diol and a polysiloxane diol, wherein each diol has a number average molecular weight ranging from 1,000 to 10,000. Thus, the thermoplastic polyurethane having good hardness, and impact resistance is not suggested by the cited combination of references. Withdrawal of the rejection is respectfully requested.

Claims 12-18 stand rejected based on 35 USC 103(a) as obvious over Forshner et al in views of Harris et al, U. S. Patent Publication 2003/0078341. This ground of rejection is respectfully traversed.

Applicants retain their position as stated above with respect to Forshner et al.

As to the matter of the Harris et al patent, the same discloses a golf ball cover which is formed of a thermoplastic polycarbonate-urethane copolymer. The copolymer is formed by copolymerizing a hydroxyl terminated polycarbonate, an aromatic diisocyanate and a glycol

chain extender. However, as in the case of the above-discussed prior art, this reference also fails to suggest a high molecular weight reaction component which is combination of a polyether diol and polysiloxane diol, wherein each diol has a number average molecular weight ranging from 1,000 to 10,000. The present polyurethane is quite distinctive over the art of record in having this polymer component. Accordingly, withdrawal of the rejection is respectfully requested.

In view of the foregoing revisions and remarks, it is respectfully submitted that the application is in condition for allowance. Early notice to this effect is earnestly solicited. The Examiner is requested to telephone the undersigned should additional changes be required in the case prior to allowance.

Respectfully submitted,

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